Attorney Docket No.: P-4333-US3

## AMENDMENTS TO THE CLAIMS

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Please add or amend the claims to read as follows:

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1-42. (canceled)

43. (Currently amended) A system for reconstructing an image, the system comprising: a controller to:

receive selected image data from an in-vivo device;

pre-process the selected image data by applying error correction code, gradient evaluation, or detecting edges; and

interpolate the selected image data to produce reconstructed image data, so that the reconstructed image data includes more data than selected image data.

- 44. (Currently amended) The system of claim 43, wherein the controller interpolates by linear interpolation, quadratic interpolation, bicubic interpolation, polynomial interpolation, or weighted average interpolation. interpolation, polynomial interpolation, and weighted average interpolation.
- 45. (Previously Presented) The system of claim 43, wherein the controller is to produce additional image data resulting in a reconstructed image.
- 46. (Previously Presented) The system of claim 43 wherein the controller is to post process the interpolated image data.
- 47. (Previously Presented) The system of claim 46, wherein the controller is to post process by a method selected from a group including: image sharpening, color suppression, intensity adjustment, convolution and applying a median filter.
- 48. (Canceled) The system of claim 43, wherein the controller is to pre-process by a method selected from a group including applying error correction code, reducing noise, gradient evaluation, and detecting edges.

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- 49. (Previously Presented) The system of claim 43, wherein the controller is to generate reconstructed data based on said selected image data.
- 50. (Previously Presented) The system of claim 43 wherein the controller is to receive the selected image data from a swallowable capsule.
- 51. (New) The system of claim 43 comprising an in vivo imager to receive a plurality of input data corresponding to an image and to produce said selected image data.
- 52. (New) The system of claim 51 comprising a transmitter to transmit said selected image data.